



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/701,997

11/05/2003

Arnett R. Weber

60,130-1885; 02MRA0391

6647

26096 7590 07/20/2009
CARLSON, GASKEY & OLDS, P.C.
400 WEST MAPLE ROAD
SUITE 350
BIRMINGHAM, MI 48009

EXAMINER

SCHWARTZ, CHRISTOPHER P

ART UNIT

PAPER NUMBER

3657

MAIL DATE

DELIVERY MODE

07/20/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/701,997	Applicant(s) WEBER, ARNETT R.	
	Examiner Christopher P. Schwartz	Art Unit 3657	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In view of the Appeal Brief filed on April 22, 2009, PROSECUTION IS HEREBY REOPENED. as set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/Robert A. Siconolfi/

Supervisory Patent Examiner, Art Unit 3657

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3657

3. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison in view of Sakai et al. and Richardson et al. '810

Harrison discloses a leveling system for a vehicle which is able to compensate for changes in temperature using the valves at 25 and 28. See column 1 lines 35-67 and column 2 lines 17-25. Note also the absorber/spring at 21.

Harrison lacks the specifics of the shock absorber/air spring combination. Sakai et al. is relied upon to show a known general type semi-active type of absorber -spring combination in the several embodiments that can be adjusted dependent upon the "status of the vehicle".

Lacking is a specific showing in Harrison of exchanging hotter air for cooler air, although presumably this is inherent in the device.

The reference to Richardson et al. is relied upon to supply this teaching in the background of col. 1, col. 3 lines 20-50 and figure 2. Note the temperature response valves at 34 and 38. Note it is notoriously well known in the art that at least some elements of air and hydraulic fluid systems are often interchangeable. Although not applied see the patent to Heyring col. 11 lines 37-42.

One having ordinary skill in the art at the time of the invention would have found it obvious to have utilized an absorber/spring combination in the system of Harrison as taught by Sakai et al. and the cooling methods taught by Richardson et al. so that the damping and leveling characteristics of the system may be readily adjusted to changing temperature conditions.

Art Unit: 3657

As discussed in the Harrison patent a number of options are provided for compensating for temperature rises which in turn lead to excessive pressure build up in the system. Temperature rises within the reservoirs can cause the air within to be blown off into the atmosphere through the dump or relief valves, dependent upon which option is used (see the discussion in column 3). See column 2 lines 13-24 and column 3 lines 15-19. Note that cooler atmospheric air may be introduced into the system, even if in small amounts. But it seems this amount will depend upon which optional arrangement discussed in column 3 is utilized.

Regarding claim 2 one having ordinary skill in the art at the time of the invention would have found it obvious to have used temperature sensitive valving in the system of Harrison, at 25,28,18 or 22, as modified to adjust the ride and/or handling characteristics upon a predetermined temperature change in the air/gas pressure in the air chamber.

Regarding claim 3 although the valves of Harrison are pressure sensitive valves, temperature sensitive valves could be employed simply as an alternative equivalent. Note the "cooler" air could come from the atmosphere (even if in small amounts) but also from the low pressure reservoir. The leveling valve could be that at 18, as broadly claimed.

The limitations of claim 4 would simply amount to alternate equivalent choice of design that is known in the art.

Art Unit: 3657

Regarding claim 5 in view of the discussion above, these requirements are considered to be met.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See the patent to Heyring col. 11 lines 37-42..

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P. Schwartz whose telephone number is 571-272-7123. The examiner can normally be reached on M-F 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rob Siconolfi can be reached on 571-272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher P. Schwartz/
Primary Examiner, Art Unit 3657

Application/Control Number: 10/701,997
Art Unit: 3657

Page 6